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More May Not Mean Better In Health Care, Studies Find By GINA KOLATA

A growing body of research is leading many medical experts to ask whether more is really better when it comes to health care.

Some medical specialties and geographical areas are suffering from a glut of doctors and hospitals, these experts say. Supply seems to drive demand. More hospitals in an area mean many more days spent in hospitals with no discernible improvements in health. More medical specialists mean many more specialist visits and procedures.

"If there are twice as many physicians, patients will come in for twice as many visits," said Dr. John E. Wennberg of Dartmouth Medical School, where much of the new work is being done.

The Dartmouth researchers acknowledge that their findings are unexpected, and some experts say more work is needed to sort out cause from effect.

"These relationships are very difficult to disentangle," said Dr. Rodney Hayward, professor of health policy and management at the University of Michigan. Patients in some regions may be demanding more care, either because they are sicker or because they have come to expect it, Dr. Hayward said; doctors cluster in areas where there is more demand.

Still, Dr. Wennberg and his colleagues say the disparities are too stark to be explained entirely by such factors. In a paper published in February in the journal Health Affairs, they wrote that Medicare's typical lifetime spending for a 65-year-old in Miami is more than \$50,000 higher than for a 65-year-old in Minneapolis. In a further analysis, they found that in Miami, where medical services are particularly abundant, the federal Medicare program pays more than twice as much per person per year as it does in Minneapolis: \$7,847 in Miami, \$3,663 in Minneapolis.

Nor can the gap be explained by regional differences in medical costs, said Dr. Elliott S. Fisher, an author of the paper who is co-director of the Outcomes Group at the Veterans Affairs Medical Center in White River Junction, Vt., and a professor of medicine at Dartmouth. Older Miamians simply went to doctors and hospitals more often. In their last six months of life, they had more than six times as many visits to medical specialists as those in Minneapolis, spent twice as much time in the hospital and were admitted to intensive care units more than twice as often.

Life expectancy is no greater in regions that have more intensive medical care, the researchers find, and Medicare surveys find that their quality of care is no better.

"What increased spending buys you is generally unpleasant interventions like intensive care units and feeding tubes," Dr. Wennberg said.

Another recent study, on the distribution of newborn intensive-care specialists and the death rate among infants, reached a similar conclusion. A tripling of the numbers of these specialists did not result in any improvement in infant mortality.

The Dartmouth findings are controversial, coming when much of the national conversation is about Americans who are receiving too little care -- not too much -- either because

they lack insurance or because they cannot afford prescription drugs. Still, the research is attracting attention from mainstream medical groups, even those who say it is too preliminary to draw any firm conclusions.

"They are excellent scientists," said Dr. Yank D. Coble, president of the American Medical Association. But he added that many factors other than supply might be driving demand for medical services, including the cultural preferences in an area and the underlying health of its population.

Carmela Coyle, the senior vice president for policy at the American Hospital Association, acknowledged that more doctors and more hospitals led to more care, but she asked: "The question is, what level of care is the right level of care? We should ask the questions, have the conversation, but not jump to the conclusion that more is better or less is better."

But other doctors not connected with the Dartmouth research say that the body of evidence pointing to overuse is compelling.

"If you want to predict the amount of use, all you have to know is the supply," said Dr. Donald M. Berwick, president of the Institute for Healthcare Improvement, a nonprofit group in Boston. He says he regards the Dartmouth research as the most important in this area in the past quarter-century.

"When all is said and done," Dr. Berwick said, "the people who have been most serious about it rarely think we are underresourced. The evidence to my mind is so strong. More is not better, and it often is very, very much worse."

Dr. Wennberg is the director of Dartmouth's Center for Evaluative Clinical Sciences. A 68-year-old professor who specializes in family and community medicine and in public health, he has spent his career studying variations in medical care across the country.

But nothing, Dr. Wennberg says, is so counterintuitive as the peculiarities that keep cropping up in the use of medical services. Whether it is the frequency of visits to a doctor or how often people have diagnostic tests or how much time people with chronic diseases spend in intensive care units or how often they are hospitalized, the data are consistent, he says: the greater the supply, the greater the use.

If medical care were just another commodity, the opposite would happen, he notes. "In areas where there are too many doctors it would be like areas where there are too many McDonald's," Dr. Wennberg said. Offices would be half-empty, doctors would see fewer patients.

Instead, without even realizing it, doctors in such areas simply see their patients twice as often, monitoring their conditions ever more closely, Dr. Wennberg said. Yet he and others say there is no evidence that patients in these regions are healthier. His colleague Dr. Fisher noted that four large studies of Medicare patients, by the Dartmouth group and three others, found no improvement in mortality in areas that spend more.

Dr. John Skinner, an economist who is part of the Dartmouth research team, says the researchers focused on medical care at the end of life to control for any regional differences in the underlying health of the population -- the possibility that people in Miami might need more medical services because they are sicker than those in Minneapolis.

"People in their last six months of life tend to be pretty sick no matter where they live," Dr. Skinner said. "This is what I use to effectively split the country into different

quintiles of intensity and test whether the higher-intensity regions enjoy better life expectancy, since they certainly spend more over all on health care."

"Why do some regions spend more?" Dr. Skinner asked. "I don't think there's very good scientific evidence on when to stop. In some areas they just keep working until the very last minute."

The Dartmouth group recently asked the same questions about medical care at the start of life, in its study on the relationship between supplies of newborn intensive care specialists and the death rate among infants in the United States.

The reason for focusing on high-risk newborns, Dr. Fisher said, is that an infant's birth weight is an excellent indicator of the baby's risk of death. That allowed the researchers to compare outcomes for similar babies in regions with more, or fewer, newborn intensive care beds.

The result, they reported in May in The New England Journal of Medicine, was that the specialists were not distributed according to need. Regions with more low-birth-weight babies actually had fewer specialists.

But even though babies in areas with more neonatologists and more neonatal intensive care beds were more likely to spend time in the care of those specialists and to be admitted to those hospital units, their mortality rates were no better than those in any but the lowest 20 percent in terms of supply.

From the second to the fifth quintile, there was a fourfold increase in the numbers of newborn intensive care beds and newborn intensive care specialists, Dr. Fisher said. The more beds available, he said, the more likely it was that babies of low to moderate risk spent time in one of these hospital units, he said.

"But we didn't see any benefit," he added.

Commenting in an editorial that accompanied the researchers' article in the journal, Dr. Kevin Grumbach of the University of California at San Francisco wrote: "The saga of neonatology is emblematic of how a market-driven health care system with inadequate public planning produces too much of a good thing."

The question of how much medical care is enough "is a major issue that we need to start addressing head on," Dr. Grumbach said in a recent interview.

The accumulating data, he said, "makes you question what we're getting for this phenomenal investment in health care."